



City of Alexandria, Virginia

MEMORANDUM

DATE: JUNE 10, 2009

TO: VIRGINIA PAVING COMMUNITY LIAISON COMMITTEE

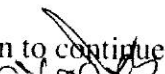
THROUGH: LALIT SHARMA, P.E., DIVISION CHIEF, T&ES, OEQ 

FROM: JULIUS HOLMES, AIR COMPLIANCE SPECIALIST, T&ES, OEQ 

SUBJECT: VIRGINIA PAVING ASHALT PLANT UPDATE

The purpose of this memorandum is to provide the committee with an update regarding the operations at the Virginia Paving Asphalt Plant (VA Paving) located at 5601 Courtney Avenue in Alexandria. VA Paving operates a hot-mix asphalt facility consisting of two production units. In addition, FCC Environmental operates a recycled oil facility within the same property. The Special Use Permit (SUP), issued in November 2006, delineated 78 conditions to protect the health and well being of the community and environment.

The following are the major benchmarks/milestones since the last Committee meeting on February 11, 2009:

- VA Paving previously revised its VA Paving 24-hour complaint hotline procedures to incorporate the valuable input provided by the Committee. The complaint hotline now forwards calls automatically and is answered by a live person. The new procedure has curbed the missed calls directed to the hotline. The VA Paving 24-hour compliant hotline number remains the same (703) 906-9918.
- The City of Alexandria's Office of Environmental Quality has recently changed its number. The general telephone number during normal business hours has changed to (703) 746-4065. The Office of Environmental Quality's contact person, Julius Holmes' new telephone number is (703) 746-4069.
- VA Paving performed emission testing at both plants in 2008. Currently Virginia Department of Environmental Quality (VADEQ) is evaluating and making revisions to the proposed air emissions permit of 2008.
- VA Paving's request to administratively amend the SUP to include natural gas as a fuel oil is pending with the City awaiting VADEQ's action/approval of the State Operating Permit.
- In March of 2009, VA Paving added two hot oil heaters to replace the malfunctioning heaters.
- VADEQ performed an air inspection on April 21, 2009. (See Attachment # 1 for their report)
- A quarterly report was submitted by VA Paving on April 30, 2009 for the previous quarter summarizing their operations.
- City Council passed a resolution to continue the VA Paving Community Liaison Committee on 

May 26, 2009. (See Attachment # 2)

- The City performed a comprehensive inspection on June 2, 2009 and records review on June 8, 2009. (See Attachment # 3 for the report)
- The City continues to monitor VA Paving's operation and evaluates them against SUP production caps and other limits on a routine basis.
- The City continues to respond to odor complaints in a timely manner.
- The City continues to operate an ambient air monitoring station for particulate matter at the Armistead Boothe Park in Cameron Station. (See Attachment # 4 for the updated data)

VA Paving Complaints and City Response Summary

A 24-hour VA Paving Complaint Hotline was established by VA Paving for all complaints related to VA Paving and FCC Environmental. In addition, the City's 24 hour nuisance abatement hotline takes VA Paving complaints and routes them to the appropriate staff for follow-up. This hotline as well as additional contacts and information resources were disseminated to the community at the Community Liaison Committee meeting held on February 11, 2009. In addition, that information is posted on the City's Planning and Zoning webpage dedicated to VA Paving and it is included in the procedures for the City Nuisance Hotline. A total of ten complaints were received dealing with seven separate episodes during this time period.

Episode # 1: Odor complaint: A complaint was received through the VA Paving hotline concerning asphalt odors in the Cameron Station area on the morning of January 23, 2009. The City gathered information on wind direction relative to the area odors was detected. VA Paving had no production at this time and had not produced any product in the previous week. The odor complaint may have been linked to the FCC Environmental facility operations. City staff visits this facility on a routine basis, and works with the on-site facility manager to improve their operations during transfer of recycled oil to awaiting tankers. FCC Environmental currently provides a log of daily measurement of volatile organic compounds (VOCs) to the City. This log includes two readings per day on their air filtration system and additional points around the facility. This complaint could not be validated by the City staff.

Episode # 2: Odor complaint: Two complaints were received via telephone and email to Office of Environmental Quality concerning asphalt odors in the Cameron Station area on the early morning of April 17, 2009. The hotline was not used and as a result no immediate assessment could be performed to generate a rapid response to this issue. A follow up inspection was performed and no issues were identified. One complainant could not be reached for an interview and messages were left, but, no response was received. The other complainant was given information about the VA Paving hotline.

Episode # 3: Odor complaint: A complaint was received via email and telephone to the Office of Environmental Quality concerning asphalt odors in the Cameron Station area on the morning of April 23, 2009. The hotline was not used and as a result no immediate assessment could be performed to generate a rapid response to this issue. A follow up inspection was performed and the complainant was interviewed. Complainant was given the VAP hotline number to generate a

quicker response. Due to the delay created this complaint could not be verified.

Episode # 4: Odor complaint: A complaint was received via telephone to the Office of Environmental Quality concerning asphalt odors in the Cameron Station area on the morning of May 8, 2009. There were a total of two complaints for this event. A follow up inspection was performed and the complainant was interviewed. Complainant was given the VA Paving hotline number to generate a quicker response. The plant manager investigated this issue and responded with an email to the Committee, the City and the complainant. The hotline was not used and as a result no immediate assessment could be performed to generate a rapid response to this issue. This complaint could not be verified.

Episode # 5: Odor complaint: Several complaints were received via hotline, email, Virginia Paving hotline. There were a total of four complaints including reports of associated very severe odors were reported as part of this episode. On the night of May 12, 2009, these complaints were received by Office of Environmental Quality (OEQ) concerning asphalt odors in the Cameron Station area. OEQ, the Office of Building and Fire Code Administration (OBFCA) and VA Paving staff arrived after receiving the call via the hotline and responded with in 20-45 minutes of the call. Trace amounts of odor were noticed in the area by VA Paving Staff. City staff and VA Paving personnel monitored the area for several more hours and no other odors were detected. A Council request was answered related to this odor issue and a response was sent to the complainant.
(Attachment 5)

Episode # 6: Odor complaint: Two complaints were received via the hotline on the morning of May 19, 2009. The complaints were investigated by City staff and well as VA Paving personnel. The operations did not begin until 1.5 hours after the odor complaint was received and could not be linked to VA Paving. City staff reported that they smelled a slight odor that may have been asphalt but it dissipated very quickly.

Episode # 7: Odor complaint: A complaint was received via the VA Paving hotline concerning asphalt odors in the Cameron Station area on the night of May 20, 2009. This complaint was investigated by City staff as well as VA Paving personnel. City staff noted smelling a slight odor when in route at the intersection of Harold and Cameron Street near the school. City staff and VA Paving personnel returned to this area to monitor odors using the photoionization detector (PID) until approximately 1:17AM. No odors were detected by the City staff or VA Paving personnel during the monitoring period.

The City requests that all complaints be called in immediately to the VA Paving 24-hour hotline which can then be followed with calls to City Nuisance Abatement Hotline or Julius Holmes (City staff assigned to VA Paving). It is extremely difficult to investigate and validate complaints, particularly odor complaints that are reported after the fact. Please share this information with members of the community so that complaints and concerns can be thoroughly investigated and resolved. The VA Paving 24-hour complaint hotline remains the same, (703) 906-9918. The City Nuisance Abatement hotline number is (703) 836-0041 and Mr. Holmes' contact information is (703) 746-4069 (office) and email address julius.holmes@alexandriava.gov.

Asphalt Production Data

VA Paving submits weekly reports to the City on hourly and daily production data, including the type and quantity of fuels used. This enables the City to monitor operations for limits set in the SUP.

Total Annual Production Limit = 850,000 tons	2009 Total Production =94,409 tons*
Night Annual Production Limit = 275,000 tons	2009 Night Production =6612 tons*
Permitted Number of Nights = 110	2009 Number of Night Shifts = 8*

*Totals as of June 9, 2009

Capital Improvement Projects

VA Paving has completed most of its capital improvement projects. The following projects are scheduled for completion by December, 2009: the replacement of the diesel locomotive; the final phase of the landscape plan, and the purchase of the remaining diesel trucks.

Ambient Air Quality Monitoring

The City continues to monitor ambient concentrations of particulate matter at the monitoring station located at Armistead Boothe Park, near the Samuel Tucker Elementary School in Cameron Station. Monitoring is being conducted to measure the ambient air concentration of particulate matter equal to or less than 10 microns in diameter (i.e., PM-10) in the air surrounding Cameron Station. The attached report for the period June 2006 to May 2009 shows that PM-10 concentrations at Cameron Station remain well within the National Ambient Air Quality Standard. (Attachment 4)

Attachment:

1. VADEQ Air Inspection Report
2. City Council Resolution on VA Paving Liaison Committee
3. City's Comprehensive Inspection Report
4. Cameron Station PM10 Air Monitoring Data
5. Response to the City Council Request regarding May 12th odor episode

VIRGINIA PAVING COMPANY

Division of The Lane Construction Corporation



P.O. Box 22247
Alexandria, VA 22304
703-751-7100
701-751-4249 FAX

P.O. Box 910
Stafford, VA 22555-0910
540-659-5177
540-659-3021 FAX

P.O. Box 1235
Sterling, VA 20167-1235
703-471-8787
703-834-3023 FAX

City of Alexandria
Julius Holmes
Office of Environmental Quality
Transportation and Environmental Services City of Alexandria
City Hall
301 King Street, Room 3900
Alexandria, Virginia 22314

May 22, 2009

Re: 5601 Courtney Avenue; Plant Site
Alexandria, Virginia
SUP #2005-0042

Dear Julius Holmes

In accordance with the Special Use Permit, Virginia Paving is providing the attached Air Inspection Report. This report relates to the stack testing completed by Virginia Paving in late 2008. The stack testing was conducted so that accurate emissions limitations could be included in the facility's air permit. As you know, a modification to that permit is currently pending, based on a request for modification submitted by Virginia Paving in January 2007.

Although the report indicates a finding of noncompliance, this finding relates to the emission limitations in the current permit. As DEQ notes in its report, new emission limitations are being developed and the testing was not conducted for purposes of determining compliance. We expect that VDEQ will be issue a new permit for review in the near future. The Report is not a notice of violation. Virginia Paving has previously paid a civil penalty and agreed to a Consent Order to resolve alleged violations relating to earlier stack tests and alleged exceedances of short term emission limitations for NOx. The 2008 stack testing was conducted as part of the implementation of the Consent Order.

More importantly, the Report documents the details of the stack testing process, and demonstrates that Virginia Paving completed the testing in accordance with the established protocol. The stack testing provides an accurate foundation for the establishment of new emission limitations for the facility.

Virginia Paving looks forward to continuing to work with the City to ensure that an accurate air permit is issued expeditiously.

If you have any questions about the attached report, please call me at 703 751-7100.

Sincerely,

A handwritten signature in cursive script, appearing to read "Chris Monahan".

Chris Monahan
Virginia Paving Company
Environmental Coordinator

CC: T&ES - Lalit K. Sharma
Virginia Paving Liaison Group
DAL
DMH



Commonwealth of Virginia

Registration No: 70579

AFS Plant ID: 510-00001

Plant Name: Virginia Paving Company
Alexandria Plant

Classification: Synthetic Minor

Address: 5601 Courtney Ave

Region: NVRO

Report No: 260089

AIR INSPECTION REPORT

Inspection Date: 04/21/09

Contact Name: Chris D Monahan

Type: PCB Without Site Visit

Contact Phone No: (703) 751-7100

Inspector: William G Gillespie

Air ProgramSubpart

Inspection Result: Out of Compliance

NSPS

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SIP

Reason:

Review Stack Test Report (Observed)

Additional Information is Attached

Inspector Comments:

Facility Contact: Chris Monahan, Environmental Coordinator, Virginia Paving Company.

Purpose

The Virginia Department of Environmental Quality (DEQ) required Virginia Paving Co. to conduct stack tests at their Alexandria facility to determine emission limits for a new permit. The plant, located at 5601 Courtney Avenue in Alexandria, VA had conducted stack tests in 2004 and 2007 but these tests were flawed. The 2004 stack tests appeared to use incorrect stack dimensions to calculate emissions. During the 2007 stack tests, the facility failed to combust used oil during the entire test period.

Air Compliance Group (ACG) performed the fall 2008 stack tests for Virginia Paving. ACG performed stack tests on Plant #1 October 21- 23, 2008 and performed stack tests on Plant #2 November 12 - 14, 2008. The following DEQ personnel observed the tests: B. Gillespie, P. Foxwell, A. Khalilzadeh, and J. Wilkinson. A report dated December 15, 2008 documented the observations of DEQ staff.

DEQ's Northern Regional Office (NRO) received the stack test report for the fall 2008 stack testing on December 29, 2008. DEQ-NRO made many requests for additional information on used oil testing and emissions testing.

Facility and Process Description

Virginia Paving operates two counter flow, drum hot mix asphalt concrete plants at their Alexandria facility. Plant #1 is rated at 600 tons/hour. Plant #2 is rated at 400 tons/hour. Both plants are equipped with a baghouse, material handling equipment, and other equipment. Plant #2 production is limited to about 285 tons/hour because of equipment limitations. The approved fuels for the plants are #2 fuel oil and used oil.

Permitting and Regulatory Standards



Commonwealth of Virginia

Registration No: 70579

AFS Plant ID: 510-00001

Plant Name: Virginia Paving Company
Alexandria Plant

Classification: Synthetic Minor

Region: NVRO

Address: 5601 Courtney Ave

Report No: 260089

AIR INSPECTION REPORT

Inspector Comments:

The facility operates under a Stationary Source Permit to Modify and Operate issued on February 17, 2005 and amended July 20, 2006.

Regulations that apply to the facility: SAPCB regulations and federal NSPS Subpart I.

Compliance History

On January 16, 2008, a Notice of Violation (NOV) was issued to this facility for:

- Submitting a stack test report and permit application that contained errors and inaccuracies,
- Exceeding short-term NOx emission limits on Plants #1 and #2 and exceeding the short-term CO emission limit on Plant #2, and
- Installing a low NOx burner without obtaining a permit.

Virginia Paving met with DEQ-NRO on February 14, 2008, and resolved the NOV with a Consent Order April 24, 2008.

Inspection Notes

Testing was conducted at or near maximum normal capacity for each plant. Plant #1 operated between 500 and 516 tons per hour. Plant #2 operated between 264 and 276 tons per hour. During testing, the plants produced RBM 25 asphalt that contained 25 percent Reclaimed Asphalt Pavement (RAP).

Fuel samples were taken during stack tests. Oil sample analyses performed by Virginia Paving appeared to show the plant combusted used fuel oil that complied with permit requirements.

ACG measured the following parameters: sampling point selection (1), stack gas velocity and flow rate (2), oxygen and carbon dioxide (3A), moisture content (4), filterable and condensable particulate matter (5/202), sulfur dioxide (6C), nitrogen oxides (7E), visible



Commonwealth of Virginia

Registration No: 70579
Plant Name: Virginia Paving Company
Alexandria Plant
Address: 5601 Courtney Ave

AFS Plant ID: 510-00001
Classification: Synthetic Minor
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Report No: 260089

AIR INSPECTION REPORT

Inspector Comments:

emissions (9), carbon monoxide (10), non-methane hydrocarbons (25A/ALT007), PM2.5 and PM10 (OTM27), and formaldehyde (316). EPA Reference Methods are indicated in parenthesis.

Information submitted by the facility appears to indicate that testing was conducted in accordance with the EPA test methods.

Results

Plant #1: Measured CO emissions of 33.36 lbs/hr were about 50 percent of estimated emissions using EPA emission factors from AP-42.

Plant #2: Measured CO emissions of 11.39 lbs/hr were about 32 percent of estimated emissions using EPA emission factors from AP-42.

Plant #2 exceeded the short-term CO emission limit stated in the facility's operating permit. The facility is technically out of compliance. Plant #2's short-term CO emission limit may be in error, however.

William B. Gillespie

Inspector's Electronic Signature
Approval Date: Apr 30, 2009

P. Wright

Manager's Electronic Signature
Approval Date: 5.4.09



Commonwealth of Virginia

Registration No: 70579

AFS Plant ID: 510-00001

Plant Name: Virginia Paving Company
Alexandria Plant

Classification: Synthetic Minor

Region: NVRO

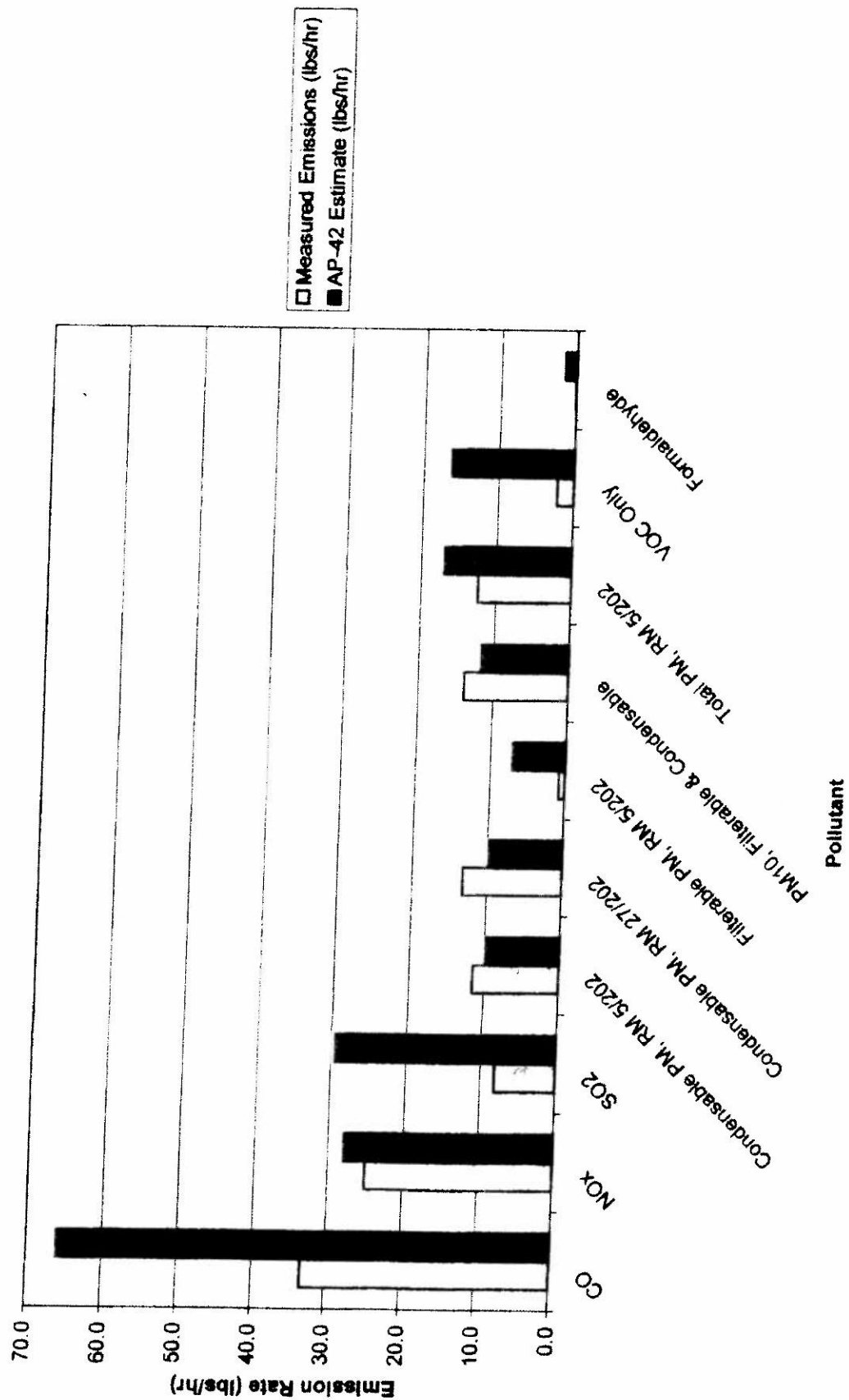
Address: 5601 Courtney Ave

Report No: 260089

INSPECTION CHECKLIST

Permit Date or Basis	#	Requirement Narrative	Observation	Comp Status
07-20-06	17.	Emission Limits: Asphalt Dryers: Emissions from the operation of the drum dyers shall not exceed the limits specified below:	Plant #1: CO emissions were 0.066 lbs/ton of asphalt, less than the permit limit of 0.13 lbs/ton of asphalt.	Out of Compliance
		Plant #1	Plant #2: CO emissions were 0.042 lbs/ton of asphalt which exceeded the permit limit of 0.012 lbs/ton of asphalt. The permit limit may be in error however.	
		CO 0.13 lb/ton		
		NOx 0.021 lb/ton		
		SO2 0.058 lb/ton		
		PM10 0.023 lb/ton		
		VOC 0.0028 lb/ton		
		Plant #2		
		CO 0.012 lb/ton		
		NOx 0.023 lb/ton		
		SO2 0.058 lb/ton		
		PM10 0.023 lb/ton		
		VOC 0.0021 lb/ton		
		These emission limits shall be used as emission factors to calculate and demonstrate compliance with the annual emission limits provided in Condition 19.		

Virginia Paving 2008 Stack Test Plant 1



Virginia Paving 2008 Stack Test Plant 2

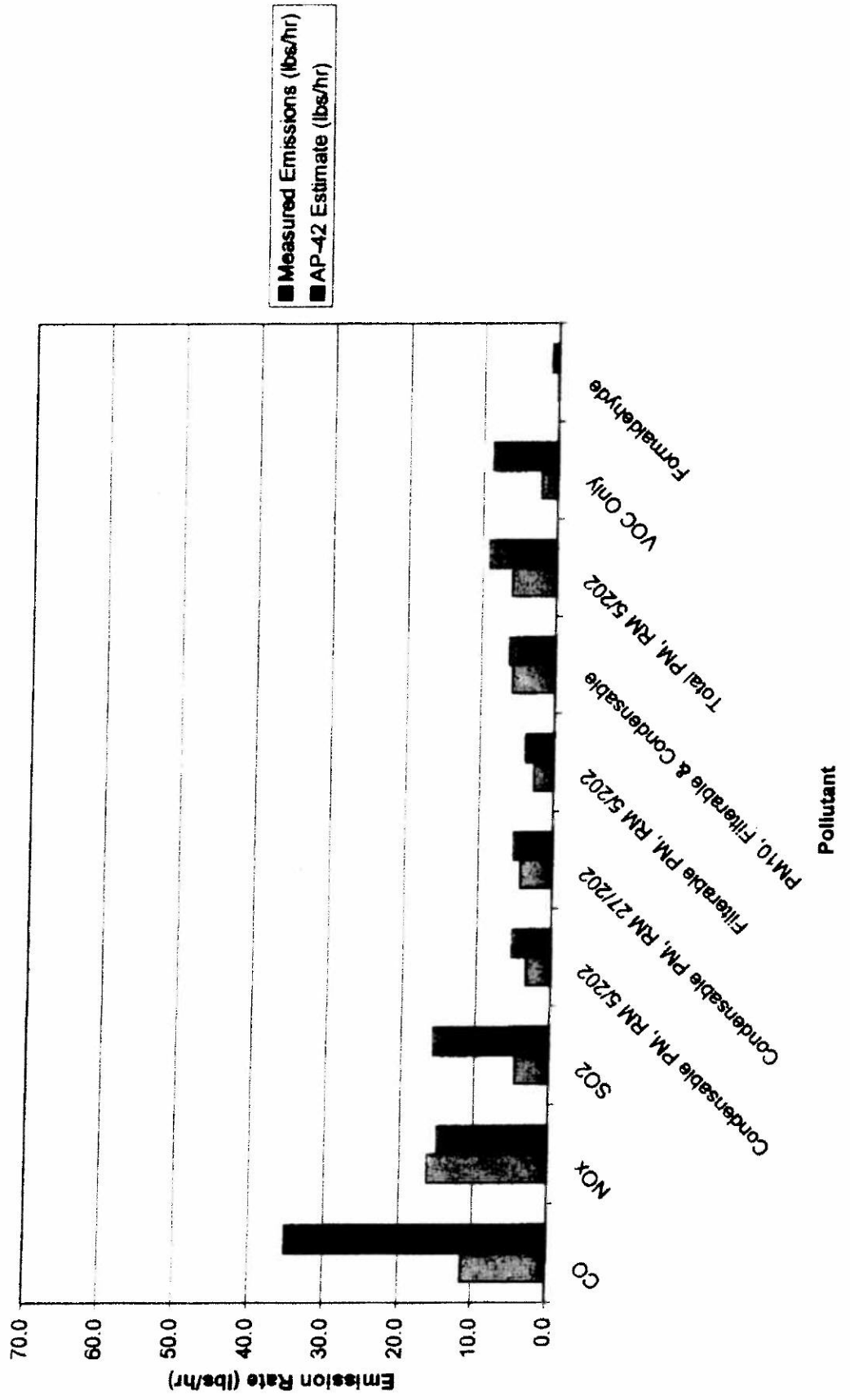


EXHIBIT NO. 129
5-26-09

City of Alexandria, Virginia

MEMORANDUM

DATE MAY 18, 2009

TO THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL

FROM JAMES K. HARTMANN, CITY MANAGER *J*

SUBJECT RESOLUTION RE-AUTHORIZING VIRGINIA PAVING
COMMUNITY LIAISON COMMITTEE

ISSUE: Continuation of the Virginia Paving Community Liaison Committee to monitor compliance with the Virginia Paving Special Use Permit.

RECOMMENDATION: That City Council adopt the attached Resolution authorizing the Virginia Paving Community Liaison Committee to continue for another year.

BACKGROUND: The Virginia Paving Community Liaison Committee was formed in March 2007 to monitor compliance with the 78 conditions made a part of the Special Use Permit issued to the Virginia Paving Asphalt Company to amend their hours of operation. Eleven members from the surrounding community and business associations including a representative from Virginia Paving as well as staff from the Departments of Planning and Zoning and Transportation and Environmental Services were appointed to serve on the Committee.

The Committee has met eight times since May 2007 to discuss community concerns, complaints, and permit conditions. The meetings have been constructive in keeping the community informed, identifying and resolving issues, and in establishing a good working relationship among members of the community and Virginia Paving. Virginia Paving is in the process of continuing to make improvements to the operation including having submitted the last phase of the landscaping plan for City review and requesting, with committee support, authorization from the Virginia Department of Environmental Quality to amend Virginia Paving's state permit to allow natural gas as one of the allowed fuels. It is anticipated that these improvements will be approved and in place within the next year.

Under the proposed re-authorization, the Committee will continue to meet for one more year, performing the same oversight function as in the past two years.

ATTACHMENT: Resolution

STAFF:

Rose Boyd, Director, Citizen Assistance

Farrill Hamer, Director, Department of Planning and Zoning

Stephen Milone, Land Use Services Division Chief, Planning and Zoning

RESOLUTION NO. 2341

**SPECIAL USE PERMIT TO AMEND HOURS OF OPERATION OF THE
VIRGINIA PAVING COMPANY'S ASPHALT PLANT**

WHEREAS, City Council approved a Special Use Permit to amend the hours of operation of the Virginia Paving Company's asphalt plant located at 5601 Courtney Avenue on November 28, 2006; and

WHEREAS, there were 78 conditions of approval included in the Special Use Permit; and

WHEREAS, one of the conditions of approval was the establishment of a Virginia Paving Liaison Committee, to be appointed by the Mayor, to provide a forum for discussing and monitoring continuing impact and compliance issues arising from the operation of the plant; and

WHEREAS, City Council established the Virginia Paving Community Liaison Committee on March 13, 2007 for a one year term per Condition 76 of the Special Use Permit and extended the Committee on March 25, 2008 for a second one year term; and

WHEREAS, Members appointed to the Committee were to include citizens and businesses residing near the Virginia Paving plant, representatives of Virginia Paving, and City staff; and

WHEREAS, 11 members were appointed to the Committee, which included:

- 1 Representative from the Cameron Station Civic Association
- 1 Representative from the Summer's Grove Homeowners Association
- 1 Representative from the Alexandria City Public Schools
- 1 Representative from the Brookville-Seminary Valley Civic Association
- 1 Representative from the Cameron Station Community Association
- 1 Representative from the Alexandria Federation of Civic Associations
- 2 Representatives from the West End Business Association
- 1 representative from Virginia Paving and
- 1 staff person each from T&ES and P&Z; and

WHEREAS, initially, the charge of the Committee was to meet quarterly to review/monitor the status of compliance with the SUP for Virginia Paving; and

WHEREAS, the Committee has met eight times since May 2007, at which meetings committee members, staff and Virginia Paving representatives have discussed special use permit conditions, communicated concerns and resolved issues; and

WHEREAS, City Council wishes to continue the Committee;

NOW, THEREFORE, BE IT RESOLVED, that the Alexandria City Council hereby continues the work of the Virginia Paving Community Liaison Committee which shall consist of the 11 members identified above;

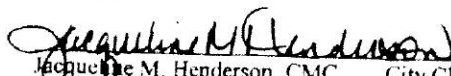
BE IT FURTHER RESOLVED, that the Committee shall continue for a period of 1 year from the date of this resolution, and shall at that time;

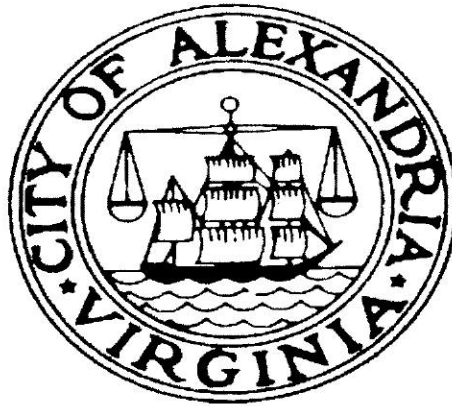
BE IT FURTHER RESOLVED, that the Committee shall meet at least twice per year but no more than 4 times per year to review/monitor the status of compliance with the SUP for Virginia Paving.

ADOPTED: May 26, 2009


WILLIAM D. EUILLE MAYOR

ATTEST:


Jacqueline M. Henderson, CMC City Clerk



Comprehensive Inspection Report

Virginia Paving Company

5601 Courtney Avenue, Alexandria, VA

June 2, 2009 and June 8, 2009

Comprehensive Inspection Report Summary

The multi-departmental onsite inspection was conducted on June 2, 2009 and a records review on June 8, 2009. Attendees at this year's comprehensive inspection were as following: Julius Holmes (Office of Environmental Quality), Jesse Maines (Office of Environmental Quality), Victor Purchase (Office of Building and Fire Code Administration), Felton Gilliam (Planning and Zoning), Timothy McGonegal (Health Department), Chris Monahan (VA Paving), and David Horton (VA Paving).

VA Paving operates an asphalt manufacturing plant in Alexandria, Virginia, under a Special Use Permit (SUP #2005-0042). The SUP requires that various City departments conduct a comprehensive bi-annual inspection of the plant. The comprehensive bi-annual inspection consists of: (1) an onsite inspection of pollution control equipment, etc.; (2) a records review; and (3) visit to surrounding communities.

The Technical Inspection Checklist was developed by the Office of Environmental Quality (OEQ) to address SUP related documentation and compliance. The checklist reflects technical onsite inspections with full records review and plant operations.

Various conditions set forth in the SUP are monitored via review of records required to be kept by VA Paving. These records include hourly asphalt production and delivery logs, plant operating hours, daily fuel type usage, fuel delivery invoices, and the operating permit issued by the Virginia OEQ. A complete list of records that OEQ monitors is included in the Technical Inspection Checklist. VAP has provided full access to their entire SUP related records during requests by OEQ.

The multi-departmental onsite inspection was conducted during day operations and consisted of accessing the various areas at the plant to ascertain general site conditions and any health hazards to the workers or the surrounding communities. Those areas included the record keeping office areas; the maintenance buildings; Plants 1 and 2; the pollution control devices such as the Blue Smoke Control System, installed on Plant 1 and 2; the conveyor systems, the recycling asphalt product pile, the storm water management system, the diesel locomotive, the asphalt heaters and storage tanks, and the FCC Environmental (currently owned by Siemens) oil recycling facility. Night operations were monitored by OEQ several times on a weekly basis from April to October.

OEQ also conducts daily visits to the surrounding communities during the day and at night when the VAP is producing asphalt. Communities of concern include Summers Grove, Cameron Station and the business area abutting the plant to the north. These communities have expressed environmental concerns related to VA Paving operations. Of particular concern are asphalt odors emanating from VA Paving, petroleum odors emanating from the FCC facility, particulate and fugitive dust emissions, and noise from trucks and trains especially at night. In addition to community visits to address these concerns, OEQ monitors and addresses all citizen complaints received at the 24-hour hotline and/or received via other means, such as direct telephone and email contacts.

The VA Paving facility in Alexandria continues to satisfactorily implement the projects and procedures delineated in the SUP. During the June 2, 2009 inspection, Mr. Maines had no issues with the storm water system, but did note that the bypass chamber cartridges were not changed during the last maintenance cycle. During the June 2, 2009 inspection, Victor Purchase of the City's Office of Building and Code Admiration observed no items which needed to be addressed during the visit. During the June 2, 2009 inspection Felton Gilliam from the Alexandria Planning and Zoning Department did not find any compliance issues. Timothy McGonegal Alexandria Health Department staff member noted that areas of standing water could potentially act as mosquito breeding habitats around the facility during the spring and summer months. An area of interest was the debris located inside Backlick Run. This area of stagnate water could provide a breeding area for mosquitoes. There was no indication of mosquitoes during the inspection.

INSPECTION CHECKLIST – TECHNICAL Virginia Paving Company 5601 Courtney Avenue, Alexandria, Virginia			
Inspection Dates		June 2, 2009 June 8, 2009	
Inspection Time		9 AM-12PM, 2 PM-4 PM	
Inspection Performed by		Julius Holmes / Jesse Maines/Felton Gilliam/Victor Purchase/Timothy McGonegal	
Inspector Initials			
RECORDS REVIEW		Yes/NO/Comments and Dates Reviewed	
1	Is a copy of the State Operating Permit issued by VDEQ kept on site and readily available to plant manager and environmental compliance personnel?	Y	Reviewed 6/8/09
2	Are copies of all reports/records required by VDEQ kept on site and readily available to plant manager and environmental compliance personnel?	Y	Reviewed 6/8/09
3	Is a copy of the Special Use Permit issued by City of Alexandria kept on site and readily available to plant manager and environmental compliance personnel?	Y	Reviewed 6/8/09
4	Are copies of all reports/records required by the City kept on site and readily available to plant manager and environmental compliance personnel?	Y	Reviewed 6/8/09
5	(a) Are copies of all correspondence with Virginia DEQ available on site? (b) Was a copy of every such correspondence submitted to the City?	Y Y	Reviewed 6/8/09
6	Operating Hours (a) Is there a complete on-site record of day/night shifts of asphalt production? (b) Is there a running total of night shifts during which asphalt was produced? (Night is defined as 8pm to 5am) (c) Is the running 12-month total number of night shifts less than 110? (d) Did the facility operate on any Code Purple or Code Maroon days?	Y Y Y N	Reviewed 6/8/09

7	<p>Asphalt Production Records</p> <p>(a) Is there a complete on-site record of the tons of asphalt produced during every hour, day, month, and 12-month period of operation?</p> <p>(b) Is the maximum hourly production less than 1,000 tons?</p> <p>(c) Is the maximum nighttime (8pm to 5am) production less than 4,000 tons?</p> <p>(d) Is the maximum daily production less than 8,000 tons?</p> <p>(e) Is the maximum production on a Code Red day less than 4,000 tons?</p> <p>(f) Is the running 12-month night production less than 275,000 tons?</p> <p>(g) Are all air pollution controls required by SUP completed?</p> <p>(i) If NO, is the running 12-month total production less than 850,000 tons?</p> <p>(ii) If YES, is the running 12-month total production less than 980,000 tons?</p>	<p>Y</p> <p>Y</p> <p>Y</p> <p>Y</p> <p>Y</p> <p>Y</p> <p>Y</p> <p>Y</p> <p>NA</p>	<p>Reviewed 6/8/09</p> <p>(g) Capital replacement of the locomotive engine, trucks is anticipated to be completed by the end of the year as required by the SUP.</p>
8	<p>(a) For each asphalt delivery, is there a complete on-site record of the customer name, delivery date and time, and tons of asphalt delivered?</p> <p>(b) Was nighttime production delivered to non-government customers?</p>	<p>Y</p> <p>N</p>	<p>Reviewed 6/8/09</p>
9	<p>Low-Odor Additive Use</p> <p>(a) Are manufacturer guidelines on low-odor additive use available on site?</p> <p>(b) For each ton of asphalt produced, is there a complete on-site record of the quantity of low-odor additive used and quantity of asphalt cement used?</p>	<p>Y</p> <p>Y</p>	<p>Provided in weekly spreadsheet for VA Paving</p>
10	<p>No. 2 oil usage in hot oil heaters and drum dryers</p> <p>(a) Is there a monthly consumption record for the hot oil heaters?</p> <p>(b) Are all running 12-month totals for heater use less than 100,000 gals?</p> <p>(c) For every shipment, is there a record of sulfur content less than 0.05 wt%?</p> <p>(d) For every shipment, is there a record that fuel is on-road diesel quality?</p> <p>(e) On each heater, is there a sign indicating the use of #2 oil only as well as the use of only one heater at any time?</p>	<p>Y</p> <p>Y</p> <p>Y</p> <p>Y</p> <p>Y</p>	<p>Reviewed 6/8/09</p> <p>None have exceeded</p>
11	<p>Recycled oil usage in drum dryers</p> <p>(a) Is there a daily and monthly consumption record?</p> <p>(b) For every shipment, is there a record of sulfur content less than 0.5 wt%?</p> <p>(c) If sulfur content exceeds 0.4 wt%, is there a record of communication with fuel supplier to achieve 0.4 wt% sulfur.</p> <p>(d) For every shipment, is there a record of meeting other constituent limits? (Other limits include metals, halogens, PCB and flash point.)</p> <p>(e) Was any recycled oil used on Code Orange or Code Red days?</p>	<p>Y</p> <p>Y</p> <p>NA</p> <p>Y</p> <p>NA</p>	<p>Sulfur threshold not exceeded.</p>

13	Plant 1 Blue Smoke Control for silo, load outs, conveyors (6-stage filtration) (a) Was capture and control system certified to be 99% efficient? (Performance Test Date: June 14, 2007) (b) Are manufacturer maintenance guidelines available on site? (c) Is there a record of maintenance/repair (filter replacement, etc.)? (Last Maintenance Date: 10/08/2008)	Y Y Y	Filter replacement has been preformed. Reviewed 6/8/09
14	Plant 2 Blue Smoke Control for silo, loadouts, conveyor (venting to burner) (a) Was capture & control system certified to be 99% efficient? (Performance Test Date: June 14, 2007) (b) Are manufacturer maintenance guidelines available on site? (c) Is there a record of maintenance/repair performed on this system? (Last Maintenance Date: NA)	NA Y Y NA	Completed 6/28/2008 Reviewed 6/8/09
15	Baghouse Controls (a) Was a performance test done on each baghouse in the last 2 years? Plant 1 Test Date: 2004 and 2007 Plant 2 Test Date: 2004 and 2007 Lime Silo Test Date: NA (b) Is there a record of all tests showing TSP less than 0.03 gr/dscf? (c) Is there a record of all monthly opacity tests?	Y Y Y	No Lime Silo use.
16	Fugitive Emissions Controls (a) Is a copy of the fugitive dust BMP manual readily available on site? (b) Is there a record of opacity monitoring for RAP crusher showing < 10%? (c) Is there a record of twice-daily watering of every paved road? (d) Is there a record of once daily wet vacuuming of every paved road? (e) Is there a record of watering and vacuuming of other paved areas? (f) Is there a record of routine wetting or chemical stabilization of piles? (g) Is there a record of routine inspection of conveyor drop enclosures? (h) Were these records submitted to the City within the last six months? Last Submission Date: 10/30/2008	N N Y Y Y Y N Y	Daily records for watering RAP were reviewed. The rap crusher wasn't operating during the site visit. It is now equipped with three water sprayers: one where rap enters the crusher and two at the end of the conveyors. The water truck operated once during the inspection. No opacity issues from the grounds or RAP crusher observed.
12	Pollution Control Malfunctions (a) Was there any malfunction of any control measure for any pollutant? (b) Is there a record of these malfunctions (date, equipment, reason, etc.)? (c) Was a timely report submitted to the City for every malfunction?	N NA NA	I have no records of recent malfunctions.
17	Stack Tests (a) Is there a record of stack tests on Plants 1 and 2 (PM2.5, PM10, NOx, SO2, CO)? Last Plant 1 Test Date: 2004, 2007 and 10/21/08 Last Plant 2 Test Date: 2004, 2007 and 11/12/08 (b) Were test reports submitted to the City within 90 days of test date?	Y NA	Recent stack tests were recently completed. Time elapsed was not expired.

	(c) Is there a record of plant mix temperature readings on a daily basis?	Y	
18	Storm water Management Facility (a) Is a copy of the SWMF BMP contract readily available on site? (b) Is a copy of the SWMF O&M Manual readily available on site? (c) Is there a record of vendor-performed or vendor-certified maintenance? Last Maintenance Date: 4/9/08 (d) Were maintenance records submitted to the City within the last one year? Submission Date: 4/17/08	Y Y Y Y	Yearly Inspection performed.
19	Night Operations (a) During any night shift, was more than one dryer, one loader, one skid steer or one mobile crane operated? (b) Is there a record of all rail deliveries showing delivery date and time? (c) Is there a record of operating hours of locomotive engine, unloading operations and RAP crusher use? Were these operated at night? (d) Was any night delivery of RAP ever dumped on the top of the RAP pile?	N Y Y/N N	
20	"Hotline" Phone Number (a) Is the "hotline" active? (b) Is the name of the responsible person provided to the City and community? (c) Is there a log of complaints received at this number? (d) Have all complaints been resolved to date?	Y Y Y *	All complaints investigated.
21	Is a copy of the City's BMP manual for automotive industries kept on site and readily available?	Y	
22	Is there a record of maintenance for the locomotive engine to prevent/repair oil, lubricant or fuel leaks?	Y	Maintenance by Estetor Rane.
23	Is a copy of the comprehensive landscape plan readily available on site?	Y	Copy on site since March 2007
PLANT INSPECTION		Yes/NO/Comments and Dates Reviewed	
1	Asphalt Plant 1 (a) Was Plant 1 operational? (b) If YES, was the baghouse pressure gauge operating properly? (c) Was any visible smoke (other than water) observed from the stack? (d) Did the Blue Smoke control appear to be operating properly? (e) Was strong asphalt odor detected near the Plant 1? (f) Was the stack raised to 20-meter height? (g) What fuel was being burned in the drum dryer? #4 Fuel	Y Y N Y N Y Y	Baghouse magnetic value was 0.0. Plant was not in full production only load out from plant # 1

2	<p>Asphalt Plant 2</p> <p>(a) Was Plant 2 operational?</p> <p>(b) If YES, was the baghouse pressure gauge operating properly?</p> <p>(c) Was any visible smoke (other than water) observed from the stack?</p> <p>(d) Did the Blue Smoke control appear to be operating properly?</p> <p>(e) Was strong asphalt odor detected near the Plant 2?</p> <p>(f) Was the stack raised to 20-meter height?</p> <p>(g) What fuel was being burned in the drum dryer? None</p>	N	Plant 2 was not in operation during inspection.
3	<p>Asphalt Storage Tanks</p> <p>(a) Were tank vent condensers/steel wool filters appear to be effective?</p> <p>(b) Was strong asphalt odor detected near the storage tanks?</p>	Y N	The vent condensers appeared to be effective.
4	<p>Hot Oil Heaters</p> <p>(a) Was either of the two hot oil heaters operational?</p> <p>(b) If YES, was the other hot oil heater shut down?</p> <p>(c) Was there a sign clearly indicating that only one heater is allowed to operate at any time?</p> <p>(d) Was the stack raised to 6-meter height?</p> <p>(e) What fuel was being burned in the heater? #2 OIL</p>	Y Y Y Y Y	
5	<p>Lime Silo</p> <p>(a) Was the pressure gauge on lime silo operational?</p> <p>(b) Were any visible emissions observed from the silo baghouse exhaust?</p>	NA NA	The lime silo not in use.
6	<p>Fugitive Dust Emissions</p> <p>(a) Was there evidence of watering/vacuuming of paved roads and surfaces?</p> <p>(b) Was the RAP crusher operational?</p> <p>(c) Were any visible emissions observed from the RAP crusher?</p> <p>(d) Did transfer point enclosures appear to be effective?</p> <p>(e) Did water sprays appear to be effective?</p> <p>(f) Based on general observation, did the facility appear to be following the fugitive dust BMPs?</p>	Y Y N Y Y Y	Crusher did not operate at night. The rap crusher wasn't operating during the day site visit. It is equipped with three water sprayers: one where rap enters the crusher and two at the end of the conveyors. The water truck operated during the inspection. No opacity issues from the grounds or RAP crusher observed.
7	<p>Storm water Management Facility</p> <p>(a) Did the SWMF appear to be operating properly?</p> <p>(b) Was there evidence of sediments or petroleum products in the discharge?</p>	Y N/A	The storm water system contains ~120 filters: 100 located in the rear of the property and 20 in the front. Outfall monitoring is performed on a quarterly basis. The water samples taken from the rear outfall were free of sediment and petroleum products.

8	<p>RAP / Asphalt Pile / Backlick Run</p> <p>(a) Is the asphalt pile a minimum of 35 feet from the stream?</p> <p>(b) Is access to the RAP pile blocked at night?</p> <p>(c) Was there any evidence of RAP deposited at the top of the pile during night?</p> <p>(d) Is the stream bank properly stabilized?</p> <p>(e) Is the height of the asphalt pile on Parcel B lower than the height of the South Van Dorn Bridge?</p>	<p>Y</p> <p>N</p> <p>N</p> <p>Y</p> <p>Y</p>	There have been nights that the rap pile has been left open in recent months.
9	<p>Noise</p> <p>(a) Were any amplified sounds audible at the property line?</p> <p>(b) Was there excessive tailgate banging during truck unloading?</p> <p>(c) Was there excessive use of engine brakes?</p> <p>(d) Are there signs clearly advising truck drivers to minimize tailgate banging and use of engine brakes?</p> <p>(e) Is the truck route properly marked to minimize backup alarms?</p> <p>(f) Do trucks have ambient noise-level sensing backup alarms?</p> <p>(g) Is the RAP crusher shut down at night?</p> <p>(h) During night operation, is only one dryer unit, one loader, one skid steer and one mobile crane operating?</p> <p>(i) Is the locomotive engine taken out of service at night?</p> <p>(j) Was a train delivery received at night? If YES, did the unloading wait until daytime?</p> <p>(k) Are the noise reducing mufflers on plant cylinder exhausts effective?</p> <p>(l) Are there signs on property to limit engine idling to a maximum of five minutes?</p>	<p>N</p> <p>N</p> <p>N</p> <p>Y</p> <p>Y</p> <p>Y</p> <p>Y</p> <p>Y</p> <p>Y</p> <p>Y/N</p> <p>Y</p> <p>Y</p>	All equipment owned by Va Paving is in compliance.
10	<p>(a) Were automotive fluids (oils, lubricants and antifreeze) prevented from being disposed on the ground?</p> <p>(b) Were automotive fluids (oils, lubricants and antifreeze) prevented from being disposed in the storm or sanitary sewers?</p> <p>(c) Were equipment and automotive repairs found to occur inside building?</p>	<p>N</p> <p>N</p> <p>Y</p>	Teksolv II is now utilized (in lieu of Safety Kleen) in the parts washer. It is less hazardous than Safety Kleen. Many of the repairs are done at a different location.
11	<p>Lighting</p> <p>(a) Were only the necessary lights turned on during night operations?</p> <p>(b) Are all lights shielded and pointed downward during use?</p>	<p>Y</p> <p>Y</p>	

Cameron Station- Ambient Air Quality Monitoring

(Updated 6/10/09)

The City of Alexandria began routinely monitoring ambient air for particulate matter in 2006 at a new monitoring station located at Armistead Boothe Park, near the Samuel Tucker Elementary School in Cameron Station. Monitoring is being conducted to measure the ambient air concentrations of particulate matter less than 10 microns in diameter (PM10) in the surrounding Cameron Station monitor. This section of the report presents brief background information for this project, the analytical protocols used, and the monitoring results. Lastly, this report discusses the relevant findings.

Background

Residents near the VAP facility have expressed concerns about the health effects from potential exposure to particulate matter in their community. Specifically, the residents have raised concerns about emissions generated at the Virginia Paving hot mix asphalt facility. This facility is located near residential areas at Cameron Station and Summer's Grove.

To address these concerns, the City conducted a short-term monitoring study in August of 2004. Two monitors were used for the study, one located at the Armistead Boothe Park and the other at the Ben Brenman Park. The study was designed to monitor PM-10 levels on days when its levels were anticipated to be the highest, based on engineering best practice analysis of weather conditions and predicted wind direction. Monitoring on days when rainfall was predicted was avoided. The results from this short monitoring period in 2004 met the national ambient air quality. However, because they were higher than expected, the City installed a new long term monitoring station to measure PM-10 at Armistead Boothe Park, near the Samuel Tucker Elementary School. This brief report presents the data collected at this newly established monitoring station since its inception, i.e. June 4, 2006.

Local Sources of Particulate Matter

Particulate Matter 2.5 microns or smaller in diameter (PM2.5) is considered a regional pollutant for the Washington, DC area. There are several sources of particulates likely to affect air quality in the Armistead Boothe Park area monitor. These includes industrial sources such as Covanta Energy - Waste facility, Mirant's coal-fired Potomac River Generating Station, Virginia Paving hot mix asphalt plant, and Vulcan Materials aggregate handling facility. Additionally, emissions generated from vehicular traffic (e.g., Route 95/495 from Springfield to the Woodrow Wilson Bridge) and roadway dust, including passenger cars and light and heavy-duty trucks, are likely to contribute to the total amount of particulate matter in the neighborhood. Contributions can also be expected to occur from construction activities and off-road fuel-burning equipment such as lawn and garden equipment, as well as natural sources such as wind blown dust.

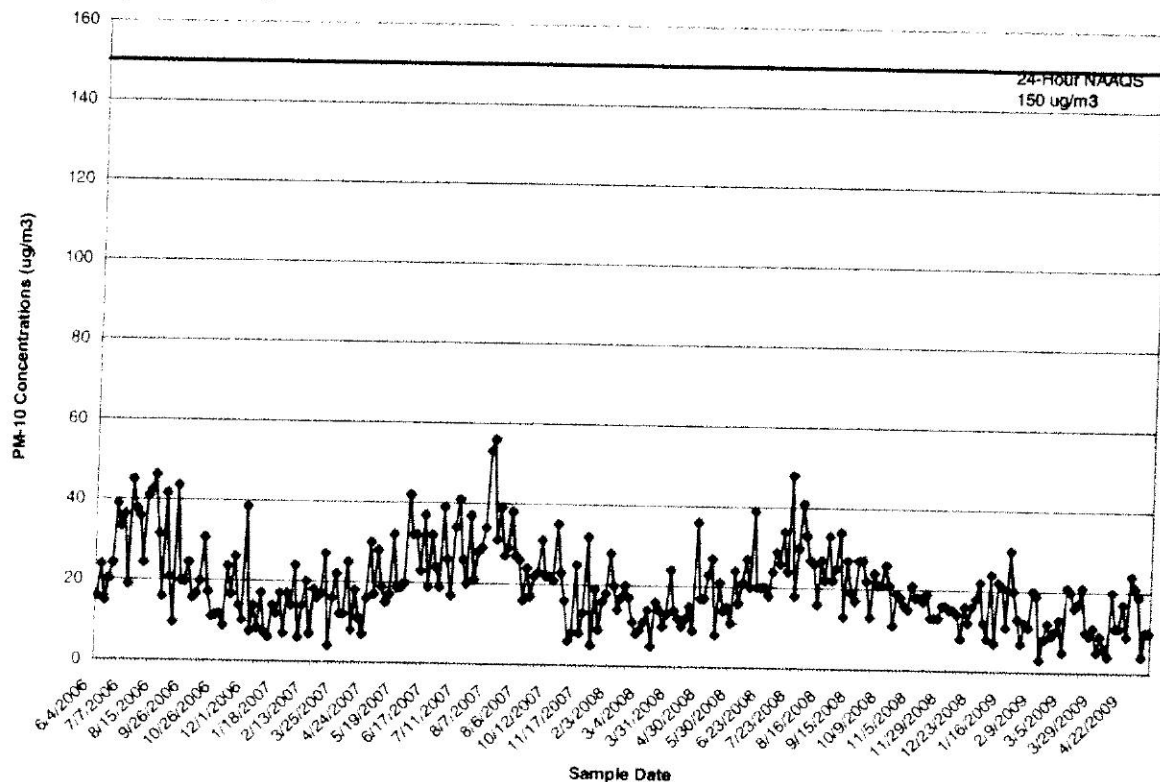
The City performed an analysis of the magnitude of emissions that are generated from the industrial and on-road mobile sources to develop an understanding of the relative contribution they may have on local air quality. In addition, microscopic analysis of the PM-10 samples collected in August 2004 showed particulate matter properties often associated with fuel combustion sources. However, it is not possible from these results to identify the exact source(s) of the measured particulate matter.

In an effort to address the region's air quality issues, the City of Alexandria participates in the region's air quality planning efforts for Northern Virginia and the Metropolitan Washington area through the Metropolitan Washington Air Quality Committee (MWAQC). Vice-Mayor Redella S. Pepper is the City's representative at the MWAQC. The City is also actively involved in discussions with respect to the State Implementation Plan (SIP) for PM_{2.5} in the Northern Virginia area. Other initiatives by the City include outreach programs that were delineated in the report *Environment for a Healthier Alexandria* published in 2007.

The EPA established a particulate matter standard for particles with an aerodynamic diameter of less than 2.5 microns in 1997. These "fine" particles were shown to have increased adverse health effects upon certain segments of the American public, such as children and the elderly. On April 5, 2005, specific counties and cities within the Metropolitan Washington DC region (including Alexandria) were designated as non-attainment for the PM_{2.5} standard. Monitoring data for the Metropolitan Washington DC region indicate that the area is below the 24-hour PM_{2.5} standard; however, the metropolitan region as a whole is not meeting the annual PM_{2.5} standard. Revised 2005 PM_{2.5} 24-hr standard of 35 $\mu\text{g}/\text{cu. m}$ became effective on 12/2006.

Monitoring Results

The following graphic summarizes the PM₁₀ monitoring results for the long-term monitoring station located at Boothe Park near the Samuel Tucker School. Monitoring at this location started in June of 2006. The 24-hour average PM₁₀ concentrations are compared to the EPA-specified National Ambient Air Quality Standard (NAAQS) of 150 $\mu\text{g}/\text{m}^3$. A comparison of the monitoring results with the NAAQS shows that the ambient PM₁₀ concentrations at Cameron Station are below the NAAQS, as depicted in the chart below. As expected, the results show considerable day-to-day variability.



For the purpose of demonstrating compliance with NAAQS, SUP condition 28a states that: The City shall continue operating the PM10 monitor at Tucker School until three years of valid data have been collected. Once three years of data is collected, the City shall determine the 98th percentile of this data, per the NAAQS, and then multiply that value by 75%, to impute a 98th percentile value for PM2.5. City is on track with collecting full three years of the data, and will be conducting required analysis upon completion of the 3 years of sampling.

Table 3-1, summarizes the most current PM10 monitoring data for the first two quarters of 2009, showing the number of samples collected and the maximum values for each of the quarter in the year.

Table 3-1: Summary of PM10 Monitoring Results Armistead Boothe Park Station			
2009 Quarter	Maximum Value ug/m3	Number of Samples	Arithmetic Mean ug/m3
1 st Quarterly Totals	30	30	14.6
2 nd Quarterly (thru 5/10/09)	24	14	12.3

**Information contained in this table is the most recently obtained from Virginia Department of Environmental Quality (05/10/09)*

This site utilizes a standard sampling schedule. The 24 hour standard for ambient PM-10 was established by the EPA at 150 micrograms per cubic meter. The highest recorded values during this sampling period were fifth of this threshold.